

Updating Output Emission Limitations Workgroup
Organizational Conference Call
Thursday, December 17, 1998
Time: 11:00 AM - 1:00 PM Eastern time
Telephone number: 1-800-252-8230

Introductions

Margaret Sheppard, EPA, began the meeting by having participants identify themselves and explain their interest in participating in the conference call.

- **EPA.** Ms. Sheppard explained that most of the EPA staff involved in this initiative are from the Acid Rain Division. One staff member from the Atmospheric Pollution Prevention Division also participated. Ms. Sheppard explained that EPA is interested in gathering advice from the participants to help the Agency produce guidelines on output-based allocation systems for states. Mr. Brian McLean, Director of the Acid Rain Division, explained that there are many ways to allocate allowances under a cap and trade system such as the NO_x Budget Model Rule issued by the EPA for the SIP Call region. Allocation schemes could include government auctioning of allowances or annual allocations and could be structured in a variety of ways. The criteria and frequency of the auctions or allocations would affect the system's behavior. The current SO₂ allocation system works well, but perhaps a different system might provide greater environmental benefits. Mr. McLean asked members to provide recommendations for improving the allocation system. Mr. McLean expressed his hope that the participants can help resolve these issues to ultimately develop a workable periodically updating output-based system.
- **International District Energy Association.** Mark Spurr explained his interest in seeing how the output-based approach will affect combined heat and power.
- **Coalition for Gas-Based Environmental Solutions.** Joel Bluestein expressed his organization's long-time support of this approach. He argued that the output-based approach recognizes efficiency and pollution prevention and treats all energy generating systems equally. This system is particularly effective in a competitive market.
- **Lockheed Martin.** Steven Evanoff, explained that as the largest federal contractor, Lockheed Martin needs to understand the issues to determine what effects this approach may have on its clients. Lockheed Martin is not advocating any approach but is participating to gain a better understanding.
- **Southern Company.** Richard Chastain explained that as a large coal-based system, Southern is very interested in any allocation approach. Southern Company submitted comments on the Federal Implementation Plan (FIP) indicating that an updating allocation scheme acts as an output production subsidy. In a competitive market, this incentive would result in a reduced market price. Thus, any benefits accrued would be lost in the market, and therefore little net benefit to the new entrant. Mr. Chastain argued that EPA should perform an economic analysis of the updating output-based approach. An output-based approach with a historical base could be appropriate.
- **ARCO.** Dr. Miriam Lev-on from the Corporate EHMS Center in Los Angeles noted that ARCO is the fifth largest US integrated petroleum company. ARCO has been working with EPA on many advisory committees and rulemakings. ARCO has been focusing on clean fuels and natural gas markets and is interested to see if this approach provides incentives for improved efficiency and lower

NO_x and greenhouse gas emissions. ARCO owns large cogeneration units on the West Coast that will be affected.

- **Harvard University John F. Kennedy School.** Dr. Robert Stavins, professor of economics and public policy, informed the participants of his work with Dr. Robert Hahn as a consultant for a law firm representing utilities such as FirstEnergy. Dr. Stavins and Dr. Hahn have been researching tradable permit systems for 15-20 years and are particularly interested in design and implementation. They support a fuel neutral dynamic output-based approach and are concerned with the incentives this approach sets up for technological change over time for improvements in overall efficiency. Dr. Stavins agreed that EPA should perform a dynamic economic analysis of this approach.
- **New York State Electric and Gas.** Mark Buzel wishes to continue the discussion that began in the OTAG process, regarding state's ability to use different output based systems. Mr. Buzel wondered if states with both attainment and non-attainment areas would be able to use a different output basis for the different areas. Mr. Buzel stressed that the changing dynamics of the power generation environment should also be factored into the debate.
- **Sythe Energy.** Linda Hickok explained that Sythe Energy is an independent power producer with power plants in eight states including cogeneration facilities and fossil plants. Sythe Energy supports a cap and trade program and believes its experience as an operator of diverse power generating plants provides a unique perspective on this discussion.
- **New York State.** Rob Sliwinski explained that NY is developing its NO_x budget for Phase II and the OTC program. New York used heat input to calculate its baseline and budget. New York will have to perform allocations again under Phase III or the NO_x SIP call program and is interested in learning what could and should be done. Mr. Sliwinski wondered about how fast an output-based system might be ready.
- **Strategic Guidance Association.** John Smith explained that the Strategic Guidance Association is working with the Independent Power Producers of New York on ozone issues. Dave Gemott, a representative of these power producers, explained that the Strategic Guidance Association is trying to determine how this process will affect states and the viability of an output based system.
- **US Department of Energy.** Jean Vernet from the Office of Economic Electricity and Natural Gas Analysis informed the participants that the Energy Efficiency and Renewable Energy Office at DOE is involved with new initiatives on combined heat and power and distributive power that directly relates to this workgroup.
- **FirstEnergy.** Dan Steen explained that FirstEnergy is the 12th largest investor-owned electric utility and the 5th largest coal generator in the U.S. (in terms of megawatt hours produced) with a diverse portfolio of generating capacity including nuclear, hydro, oil and gas facilities located mostly in Ohio and Pennsylvania. FirstEnergy is familiar with OTAG and was involved in the Acid Rain Advisory Committee. FirstEnergy overall favors output based allocations for all sources of electricity generation.
- **Consumers Energy.** Louis Pocalujka explained that Consumers Energy is a combined gas and electric utility in Michigan that has been involved in the OTAG and NO_x SIP call process. Participation in this workgroup is a logical continuation of the organization's work. Consumers Energy is interested in a fuel neutral approach and supports a robust trading system.

- **Cinergy.** Mike Gears explained that Cinergy is a combined electric and gas utility with a corporate position that supports cost-effective NAAQS attainment. Cinergy supports free market solutions and is interested in an output based approach. Mr. Gears argued that not using an output based approach results in sub-optimal situations and increases costs. These programs must be applied in the least cost least burdensome manner.
- **PSE&G.** Mark Brownstein explained that PSE&G has been a longtime advocate of output-based approaches for New Source Performance Standards (NSPS) and allocating allowances. PSE&G developed a proposal with NRDC to allocate NO_x allowances based on output of fossil units covered by the program. New Jersey has already adopted an output based allocation system for its 2003 NO_x reduction program. PSE&G would like to apply lessons learned in NJ to this process and has an open mind with regard to output based allocations for all forms of generation. PSE&G believes that output based approaches send the right market signals and are the most appropriate way to regulate emissions in a changing economic environment.
- **E-Cubed Ventures.** Michael Walker explained that E-Cubed Ventures has been and intends to continue working with PSE&G on clean air and climate change issues including developing output based approaches.
- **U.S. Navy.** Vern Nordstrom explained his participation mostly involves reporting back to the Navy. The Navy is interested in this process because it is a large energy user.
- **U.S. Generating Company.** Mark Carney explained that U.S. Generating Company is an independent generator operating in seven states, which supports output based standards as part of the NSPS and as the mechanism to allocate allowances for the states with U.S. Generating Company facilities. He noted that Massachusetts is currently considering an output based allocation system. U.S. Generating Company is participating in the workgroup to ensure consistency in allocation methodology. Mr. Carney noted that in recent discussions, many utilities supported an output-based standard, which they believe would facilitate a level playing field and good competition.
- **Baker & Botts and Houston Industries.** Larry Feldcamp and Fred McGuire explained their interest in monitoring the outcome of this workgroup. Mr. McGuire works for Houston Industries, an electric and gas utility based in Houston that has facilities across the country that will be affected by allocation policies.
- **Howery and Simon.** Dick Ayres explained that he has previously worked with E-CUBED and PSE&G on the concept of output-based systems, and has advocated this approach for many years. He believes this concept can achieve many of the benefits of the current trading program at a more efficient level.

Goals and Objectives of the Group

EPA has had a long term interest in an output based approach and is committed to developing guidance on an updating system in the near term. Mr. McLean explained that there are two paths here: 1) exploring different views on an output vs. input system and updating vs. fixed method, and 2) providing a range of options for states to pursue. To expedite the work, EPA wants to examine the two paths simultaneously.

Mr. Stavins asked whether time frames for an updating allocation system would be part of the teleconference. Mr. McLean commented that analytical issues will be addressed in the Advisory

Committee but the Workgroup will focus on establishing mechanisms. Mr. Brownstein suggested that the technical feasibility of an output-based system should be established in this forum because this feasibility has been questioned numerous times in other settings. Mr. Stavins recommended that the group not view allocation issues as a dichotomous choice between a one-time allocation versus a repeated allocation in a short time frame. There are sound economic arguments that indicate that neither method will be economically efficient, Mr. Stavins asserted. The real question is what is the optimal length of time period used.

Handout: EPA's Issues

Ms. Sheppard asked if participants had questions about the handout that was provided to workgroup members before the meeting. Ms. Sheppard responded to a question on the timeframe of the group's work by stating that EPA wants a proposal developed in the first half of 1999 to share with the group. By 2000, EPA wants something final (and therefore would not be included the states' September 1999 submissions). If an updating system is chosen, the proposal will not impact the first three years of allocations. EPA wants to make sure something is in place by 2003. The lifetime of the workgroup for the nuts and bolts issues will be through the first 6 months of 1999. Pursuing policy questions could occur separately from developing the guidance. Mr. Brownstein suggested prioritizing a list of discussion issues, because getting into the issues over the teleconference would be complicated and lengthy.

- Ms. Sheppard accepted questions of clarification regarding the handout:
- One participant asked for clarification on bullet 3 in the section "Comparing and converting heat input, steam input, and electrical output." Bullet 3 reads: If output data were not available directly, what would be appropriate assumptions to make about the efficiency of conversion from heat input to output? The participant wanted to know if heat input meant fuel input. Ms. Sheppard agreed that this was EPA's intent.
- Another participant from ARCO asked about the "Mechanical Output" part of the first section concerning sources of information. Ms. Sheppard explained that EPA is wondering whether provisions for mechanical output need to be included in guidance for states. If so, what are the units of measurement for mechanical output? EPA has basic questions like this. The participant offered that one example is that there are turbines used for mechanical output and not used in a combined cycle to produce steam. Ms. Sheppard suggested that she would follow up with the participant.

Additional issues

- Mike Gears from Cinergy suggested not limiting questions to whether data is available but also how sources might measure the data that is available.
- Mr. Pacolujka from Consumers Energy suggested that EPA ensure that state government representatives were adequately represented in the workgroup (there was only one state representative (NY) on the call). Ms. Sheppard noted that representatives New Jersey, Ohio, and Indiana were part of the workgroup but were unable to make the teleconference.

Reviewing issues of importance to the group

Ms. Sheppard reviewed the issues of importance raised in this call.

- Ensure that state government officials have a good geographic representation.
- Weighing the benefits of an output-based compared to an input-based system.
- Consider the types of generation the system should include (eligibility for allocation).
- If there are updating allocations, what is the appropriate timeframe?
- Make explicit what plants have to do to achieve the system's goals.

(Editing Note: Another participant suggested that the workgroup consider alternative approaches to designing a trading system such as different allocations to sources in different transport zones within a state.)

Ms. Sheppard suggested members of the workgroup contact her if they have new issues to add to the Workgroup's agenda. Her contact information is:

Email sheppard.margaret@epa.gov

Phone 202-564-9163

Preparing for next discussion/action items

Ms. Sheppard asked members to block off time on February 3rd and the morning of Feb. 4th for a meeting in the Ronald Reagan building in Washington, DC. If it becomes apparent that there will not be enough discussion to merit a day and a half, Ms. Sheppard will notify workgroup members.

Ms. Sheppard requested that workgroup members submit brief responses to the questions provided in the handout and more detailed responses on one or two issues on which the member may have particular expertise. The first submission should be made by January 15 and the more detailed responses should come by January 22. Members should feel free to note their priorities on their first submission. Responses will be posted on the Web early in the next week. The Acid Rain home page has a "What's new?" section where a temporary link to information on this workgroup will be placed.

One member asked that an agenda be provided to members before the next meeting so participants will be prepared to speak to the appropriate issues. Ms. Sheppard agreed to have agendas sent out in advance of the next meeting.

One member asked about the frequency of meetings after the scheduled February 3rd and 4th meetings. Ms. Sheppard envisioned monthly meetings afterward until all issues are addressed.

In terms of prioritizing issues, members should note in their submissions to the Workgroup which issues are more significant or problematic than others. Ms. Sheppard will reflect this in the draft agenda to be sent to Workgroup members.

Conference Call Attendees

Government—Federal and State

Margaret Sheppard, EPA/Acid Rain Division

Brian McLean, EPA/Acid Rain Division

Anna Garcia, EPA/Air Pollution Prevention Division

Sarah Dunham, EPA/Acid Rain Division

Mary Jo Krolewski, EPA/Acid Rain Division

Dwight Alpern, EPA/Acid Rain Division

Jean Vernet, Department of Energy

Vern Nordstrom, Department of the Navy

Robert Sliwinski, NY Division of Air Resources

Joe Bryson, EPA/Air Pollution Prevention Division

Utility/Electric Power Industry

Mark Buzel, New York State Electric & Gas Corp.

Richard Chastain, Southern Company

Louis Pocalujka, Consumers Energy

Mike Gears and Bernie Huff for Bill Tyndall, Cinergy Corp.

Daniel Steen, FirstEnergy

Linda Hickok, Sythe Energy

Mark Carney, US Generating Company

Mark Brownstein, Public Service Electric and Gas Company

Mark Spurr, International District Energy Association

Other Industry

Steven Evanoff, Lockheed Martin

Noboru Fuji, Nissan North America

Larry Feldcamp, Baker and Botts

Bruce Craig, E-Cubed Ventures

Michael Walker, E-Cubed Ventures

Joel Bluestein, Coalition for Gas-Based Environmental Solutions

John Smith, Strategic Guidance Association

Dave Gemott, New York Independent Power Producers

Fred McGuire, Houston Industries

Dick Ayers, Howery and Simon

Contractor Support

Dana Palmer, ICF Inc.

Marilyn Pineda, ICF Resources

Eva Wong, ICF Inc.